On some Indian picture rocks in Fayette County, Pa. By Mr. J. Sutton Wall.

(Read before the American Philosophical Society, Oct. 3, 1884.)

The tracing on muslin (Plate I.), exhibited this evening, was made by Mr. William Arison, of Monongahela City, and myself, in the month of September, 1882.

This rock is perched on the crest of the hill facing the Monongahela river, opposite the town of Millsborough, at an elevation of 290 feet (by barometer) above water level of the river. It is a detached portion of the Waynesburgh sandstone which outcrops in the vicinity. Rather coarse in texture, it has a fairly even and smooth top surface, and is approximately sixteen feet square, with perpendicular sides. The top of the hill, next to the river, terminates rather sharply, and the ground surface receding from the river has a gradual fall of about ten feet per hundred for a distance of perhaps eighty yards, and then rises into a more elevated hill to the eastward of the rock. The rock occupies a position from which a very fine view of the river and Ten Mile valley can be had. The edge of the rock next to the river rests about even with the ground surface surrounding it, while the opposite edge rests about three feet above ground. It is not fissile and the top surface would be difficult to remove. The outlines of the figures are formed by grooves on channels smoothly and regularly cut or incised in the top surface and on two sides, of the width shown on the tracing, and are from three-fourths of an inch to a mere trace in depth. The foot-prints and cup-shaped cavities are carved about the same depth, except the large circular disc, which also is a cuppedshaped cavity, about five inches in depth. There are the outlines of two animals carved on the sides, one on the south side, which is shown on the tracing, and the other on the east side, not shown.

The figure composed of three connected links, with three lines or perhaps arrows drawn across them, I am inclined to place to the credit of vandalism, which is still in rapid progress, and will ultimately destroy the original carvings. Some of the lines are becoming quite faint, owing no doubt to erosion by the atmosphere. We only traced those lines and portions of lines that were distinctly legible.

Mr. Joseph Horner, and old resident of Millsborough, informs me that the figures were much more distinct, when he first saw them fifty years ago, than at the present time. A tradition exists in the neighborhood that the early settlers were informed by the Indians, that they had no knowledge of the authors of the carvings, but that they found them as the "white men" then saw them. The tracing shows all the figures reversed, but by looking through the canvas from the other side you can see them in their true position, which may be done by placing lights behind it. The tracing was made by painting the grooves and indentations with a mixture of lamp-black and turpentine, and then spreading strips of muslin over the portions painted, and by using a brush and our fingers,

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the lines were transferred to the muslin; after which it was sewed together in proper connection, and the lines made more permanent by repainting with diluted printers' ink. Mr. E. B. Harden, of the State Geological Survey, recently photographed a small portion of the top surface of the rock; but was unable to obtain a proper position for photographing the whole surface. To do this properly an elevated position would be necessary at some distance from the rock. This could be done by the aid of a small amount of lumber and tools, which we did not have at hand at the time of our visit.

Plate 2 is a reduction from a tracing on muslin (natural size), showing the figures carved on the surface of a rock located on the east shore of the Monongahela river, a half mile below Geneva, in Fayette county, Pennsylvania. The rock has a fairly even and smooth upper surface, falling slightly toward the water, and is an eroded portion of the Morgantown sandstone in place. A portion of this rock containing figures was removed some years since, and used in constructing a building in Geneva. The figures thus removed I did not see.

The execution of the carvings appears to be of the same character as that on the rock shown by Plate 1. The marked resemblance of many of the figures leads me to consider it of the same age and origin as the other carved rocks in this region. At the time of my visit, in 1881, the upper portion of the rock rested only about four feet above low water, and I have since learned that the portion containing the figures copied has been rendered inaccessible by the back water, formed in the pool from the construction of Lock and Dam, No. 7, at a point nearly two miles farther down the river.

Plate 3 is also a reduction from a tracing of a carved rock located in West Virginia, near the north side of the Evansville pike, six miles southeast of Morgantown. This is along the crest of an elevated ridge, commanding a fine view of the surrounding country. The ridge on either side of this pike is strewn with numerous large blocks of sandstone, evidently detached from their native bed, and many of them present excellent surfaces for carving. But I only found two of them to contain any figures, out of a large number which I examined in the vicinity.

The figures shown on this plate were all found on one rock, and are represented in their true position. They are incised or cut in the top suface, evidently in the same manner as the rocks already mentioned. The small pot-shaped holes, buffalo and bear tracks form a common feature of all these pictured rocks. Each individual rock is however usually found to contain some figures not shown on others. Slight variations are also noticeable in the manner of representing certain animals and reptiles; as for instance difference in posture. The rattlesnake is distinguishable by the line or bar which marks the termination of the body proper and shows the beginning of the rattles. The semi-circular figure on the left side of the plate forms, in my judgment, an interesting feature of this rock. It strikes me that this figure has been intended to represent a horse's track or foot-

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print. If this interpretation be a correct one, it goes toward fixing the age of the workmanship, and brings it within the historic period of North America.

Stated Meeting, October 17, 1884.

Present, 15 members.

President, Mr. FRALEY, in the Chair.

A letter requesting exchanges was received from Mr. J. C. Rowell, Librarian of the University of California, dated Berkeley, October 1. On motion, the University of California was placed on the list to receive the Transactions and Proceedings from the beginning.

A letter requesting missing numbers of Transactions and Proceedings American Philosophical Society was received from the Imperial Society of Nature, Moscow, dated September 1.

Donations to the Library were reported from the Royal Society of Victoria; the Annales des Mines and Revue Politique; the Royal Academy of History at Madrid; the Meteorological Office, the Journal of Foresty and London Nature; Dr. Edward Jarvis, of Boston; Harvard University; the New York Academy of Sciences; the College of Pharmacy, the Franklin Institute, the Engineers' Club, the American Journal of Medical Sciences, Rev. E. W. Syle, Mr. Heary Phillips, Jr., and L. R. Hamersly, of Philadelphia; the Maryland Historical Society; the Bureau of Education, the United States National Museum and the Surgeon-General's Office at Washington.

A paper on Herderite was read by Dr. F. A. Genth.

A paper on the Language and Ethnographic position of the Xinka (Shinka) Indians of Guatemala was read by Dr. D. G. Brinton. The paper embraced two vocabularies of three dialects, the only known existing specimens of the language.

Dr. Syle objected to the statement made in the memoir that the absence of native names of salt, maize, &c., must necessarily be taken as evidence that the aboriginal Xinkas did not know, or possess the articles until the advent of their Aztec and Maya conquerors; adducing the fact that the